

#77

D-1077

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: )  
                    **Jay Paul Drummond, et al.** )  
Serial No.:      **09/077,337** )      Art Unit: **2164**  
Filed:           **May 27, 1998** )      Examiner: **James S. Bergin**  
For:             **Automated Banking Machine** )  
                    **Apparatus And System** )

RECEIVED  
JUL 17 2001  
Technology Center 2100

**DECLARATION PURSUANT TO 37 C.F.R. § 1.131**

Commissioner for Patents  
Washington, D.C. 20231

Sir:

I, Jay Paul Drummond, hereby declare as follows:

1. At all times relevant hereto I was employed as Senior Principal Engineer with InterBold, a wholly owned subsidiary of Diebold, Incorporated ("Diebold") the Assignee of the above-identified patent application, and I am authorized on behalf of Diebold to present this Declaration.

2. I am also a joint inventor of the invention claimed in the above-identified patent application and have personal knowledge of the facts set forth herein. I am the sole inventor of the subject matter described and claimed in at least claims 44 and 46 thereof.

RECEIVED  
JUL 13 2001  
10 2600 MAIL ROOM

3. At a time prior to February 16, 1996 in North Canton, Ohio, I conceived of an invention which was an automated banking machine, such as an automated teller machine ("ATM"), that would be connected to the Internet or to a private intranet. The ATM, including a computer, would operate to carry-out ATM transaction functions, such as the reading of customer cards such as debit cards and the dispense of sheets such as bank notes, in response to receiving Hypertext Markup Language ("HTML") documents by the ATM through either the Internet or a private intranet, or both. This idea was conceived of by myself in the course of my employment with InterBold, which is a wholly owned subsidiary of Diebold and is now also called Diebold Self-Service Systems.

4. After conceiving of this ATM invention, Dale Blackson who was an engineering Director, and I had a meeting in North Canton, Ohio, prior to February 16, 1996 to discuss making an ATM in accordance with the invention. At that time InterBold was also working on a project called "MOSS" which was a project to be able to use multiple types of operating systems on the computer of an ATM, instead of only IBM OS/2 which was used on Diebold ATMs at that time. During our meeting Blackson and I discussed how this new ATM would use software that includes a browser to process HTML documents to provide the screen displays and control the transaction function devices in the ATM. After our meeting Blackson sent to me and others at InterBold the e-mail message attached as Exhibit A hereto. The dates in Exhibit A which have been deleted, are all prior to February 16, 1996.

5. Prior to February 16, 1996, Blackson, in his capacity as engineering Director, gave instructions for me to proceed with the development of a demonstration ATM system to prove that the new ATM concept would work.

6. Prior to February 16, 1996, I and other inventors at InterBold in North Canton, Ohio made an ATM which included a computer having a Microsoft Windows® operating system and Netscape® browser software. Prior to February 16, 1996 we developed a series of HTML documents which when received by the ATM caused the browser in the ATM to generate screen displays that guided a user in the operation of the ATM. We also included in these HTML documents, embedded code which comprised instructions that caused operation of a card reader, a cash dispenser and other transaction function devices included in the ATM.

7. Prior to February 16, 1996, I and other inventors at InterBold made and operated a system in North Canton, Ohio which included an HTTP server computer which delivered the series of HTML documents to the ATM. The server computer was connected to the ATM through a local TCP/IP intranet. The computer in the ATM included the Netscape® browser software, Microsoft Windows® software and other software written by myself and other inventors. This software on the ATM operated to produce the screen displays on the ATM in response to HTML documents processed by the browser to guide a user in operating the ATM. The software on the ATM also caused the card reader, cash dispenser and other devices in the ATM to operate in response to processing the HTML documents and the embedded code contained therein.

8. The system was tested prior to February 16, 1996 and was operated successfully to carry out reading data on a magnetic stripe card, cash dispensing and other transaction functions. The computer in the ATM operated to access network addresses associated with HTML documents on the HTTP server computer in response to data read from a card input to the card reader on the ATM. HTML documents accessed from the HTTP server computer generated

display screens on the ATM, and the ATM dispensed currency notes from a bill dispenser in the ATM in response to instructions included in the HTML documents.

9. This testing which was conducted prior to February 16, 1996 was successful, and established that the invention that is claimed in the above-referenced patent application would work for its intended purposes. For example, the system that was tested and operated successfully prior to February 16, 1996, operated in accordance with the method recited in claim 46 of the above-referenced patent application to:

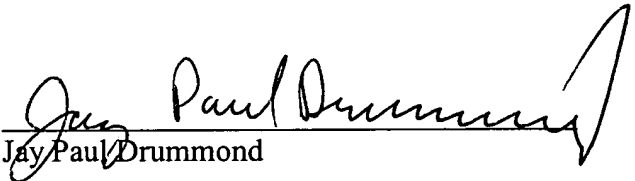
- a) operate at least one computer in an automated banking machine which was adapted to receive markup language documents;
- b) operate the computer in the automated banking machine to receive at least one markup language document; and
- c) operate the computer in response to the at least one markup language document to cause notes to be dispensed from the automated banking machine.

10. The testing described above in this Declaration which was conducted prior to February 16, 1996, was considered successful and permission to develop a commercial ATM product based on the invention was requested from Diebold management. A series of presentation screens was developed by the inventors for purposes of requesting the necessary resources to begin development of a commercial product based on the invention. These presentation screens were used as part of the presentation made to Alben W. Warf, Vice President of Diebold, prior to February 16, 1996. Copies of the presentation screens are attached hereto as Exhibits B-C. All the dates deleted from Exhibits B-C are prior to February 16, 1996.

11. Authorization to develop a commercial product based on the invention was granted by Mr. Warf. This commercial product was successfully developed and the first version of this product was introduced at the 1996 Bank Administration Institute Retail Delivery Show after the filing of U.S. Provisional Patent Application Serial Number 60/031,956 on November 27, 1996, from which the above-identified patent application claims priority.

12. As can be seen from Exhibits A-C, the invention claimed in the above-identified patent application was completed by being conceived and reduced to practice in the U.S. prior to February 16, 1996.

I hereby declare that all statements herein of my own knowledge are true and all statements made on information and belief are believed to be true, and further that the statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both (18 U.S.C. §1001), and may jeopardize the validity of the application or any patent issuing thereon.

  
Jay Paul Drummond

6-25-01  
Date

To: Mark Smith@9\_53 FinanceSys@InterBold  
 Cc: Pat Green@9\_89 PPM@InterBold  
 Brad Stephenson@9\_89 PPM@InterBold  
 Jim Block@9\_52 SST Eng@InterBold  
 Jay Drummond@9\_53 FinanceSys@InterBold

Bcc:  
 From: Dale Blackson@9\_53 FinanceSys@InterBold  
 Subject: MOSS - your very simple demo application  
 Date:  
 Attach:  
 Certify: N

---

Mark,

Jay and I briefly talked about our "forward looking" approach to ATM transactions. The HTML internet approach sounds more and more intriguing.

Let's do it. Have someone on the team look into the available tools to do a simple demo. We don't want to spend a fortune on it at this stage, but let's at least explore the feasibility. Let's go beyond thinking about, do it.

What is "it" ?

Use Internet technology to implement the ATM transaction flow. No states & screens. User lead through is via HTML screens and hypertext. User sees a screen and touches what they want. Use this technique to get to the point where the transaction is specified. Send transaction data. Get function command as some sort of Internet file. An encrypted/authenticated file transfer that specifies the function command stuff.

Could be done over private Internet. Could be done over the public Internet.

Public Internet provides the connectivity to every place. Install an ATM and plug it into the net. Nothing could be easier? Bank is on Internet. When user does a transaction, they are connected to their bank or whoever is authorized to handle the need. Browse info, do transactions.

Of course there are security concerns. But we can be pretty sure that someone will solve this for us. There are now credit card transactions via Internet. There is enough security for now, and we can easily imagine it getting better.

Internet might be too slow or unpredictable now. Don't worry too much. Someone will provide the service we need. There will be a lot of people working on this. The bandwidth is here (coming?).

How's this for software distribution! The transaction flow, screen content, etc is not in the ATM. It is on the net. Can centrally change screen content and flow as needs require.

When you use an ATM away from home, it can have the same personality as your home ATM. The personality is not in the ATM. It is in the "home page" that your own bank has for your ATM functionality.

Do some brainstorming to develop an implementation approach. Find major holes and fill them. Don't worry too much about details. The technology is evolving and chances are it will catch up with our needs.

Give me some feedback. Include me in discussion sessions.

Thanks, Dale Blackson

## PUT SELF SERVICE SYSTEMS ON THE INTERNET



Internet

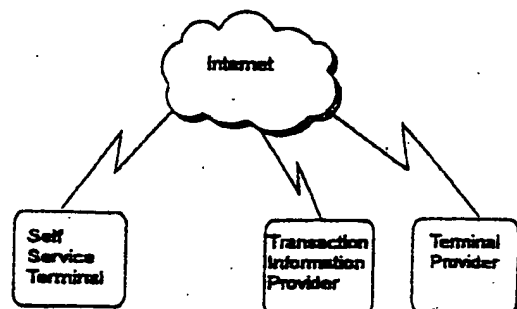
## IT'S TIME TO TRY SOMETHING NEW

- ATM control and communications techniques were designed in the 1970's
- Internet provides worldwide connectivity
- Internet provides way to access multiple databases for information and control

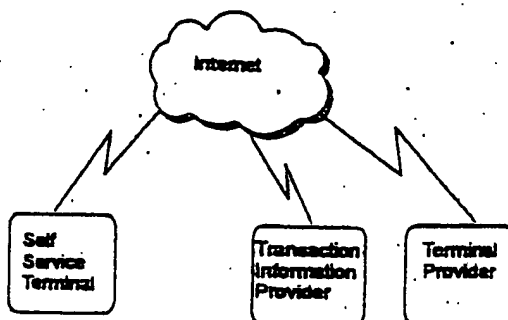
## INTERNET HAS APPEAL

- Universal awareness
- Media attention (e.g. Netscape IPO)
- Marketing sizzle
- Technical capabilities
- Progressive approach
- Lots of innovations coming
- Bandwidth is available or coming
- Security is available or coming
- Just plug it in and go

## USE INTERNET TO TRANSPORT THE INFORMATION



## LET DIEBOLD TAKE THE LEAD



## DIEBOLD PUTS SELF SERVICE TERMINALS ON THE INTERNET

- Diebold provides an alternative to current ATM network technology
- Diebold provides the Internet compatible self service terminals
- Diebold provides the Internet compatible "host" software nodes

## STRATEGIC POTENTIAL

- Putting ATMs on the network establishes Diebold's in a new market
- Positions Diebold as a solution provider on the rapidly growing Internet
- Positions Diebold as a future provider of "electronic money" services

## Transaction Lead-through

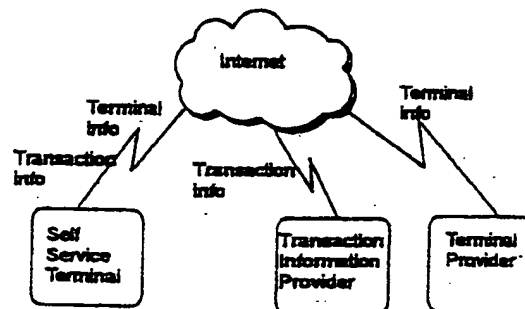
- Use Internet technology (HTML) to construct the user interface
  - User touches area of interest on display
  - Next related display panel is presented
- Send user's transaction info
  - Encrypted/Authenticated files
- Receive transaction command
  - Encrypted/Authenticated files



## YOUR "HOME" ATM IS EVERYWHERE YOU GO

- The ATM personality is established for each user as they establish connections back to their own bank
- Banks can export their personality to every networked ATM
- ATM owners provide the appliance to do what the user and their bank want to do

## Separate the Transaction Related Information from the Terminal Related Information



## CONNECTIVITY TO EVERYWHERE

- Plug the terminal into the Internet
- Transaction information providers are on the Internet
  - To process the transaction information
- The terminal providers are on the Internet
  - To process equipment status
- User establishes connection to their preferred transaction provider

## WE HAVE SOME STARTING POINTS

- MOSS project provides a suitable architecture
- This may be an interesting approach for our demo application
- Ideal approach for information browsing (i.e. kiosk applications)



**This Page is Inserted by IFW Indexing and Scanning  
Operations and is not part of the Official Record**

**BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☒ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** \_\_\_\_\_

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.**